

REMARKS

Claim 1-22 are now pending. Applicants have added claims 15-22 to more comprehensively claim the subject matter of the invention.

The Examiner has rejected claims 1-14 under 35 U.S.C. § 102(b) as being anticipated by Leung. Applicants respectfully disagree.

Applicants' technology is directed to a technique for sectioning memory so that a "subdivision of a word" can be selectively enabled or disabled. For example, a memory bank may have a word length of 64 bits with two sections of 32 bits each. Each section thus represents a 32-bit subdivision of the word. When both sections are enabled, then an access to a memory location will access a 64-bit word. In contrast, when only one section is enabled, then that same access would only access a 32-bit word. A computer system that needs only 32-bit words can configure the memory bank so that one section is disabled. As a result, when the memory bank is accessed, power consumption is reduced since only one section is enabled for access.

Leung, in contrast, describes a technique in which eight words are retrieved from memory at the same time and three bits of the address are used to select which one of the eight words is actually being addressed. Referring to Figure 1 of Leung, each DRAM bank 0-63 has 64 rows with 1024 bits in each row. (Leung, 7:39-8:51.) Each row is divided into four sections of 256 bits. Each 256-bit section contains eight 32-bit words. Leung's address is 17 bits with the 14 high-order bits used to select a DRAM bank, a row within the bank, and a section within the row. The 256 bits of that section are stored in a read buffer (171). The three low-order bits of the address are then used to select one of the eight words within the section stored in the read buffer via a multiplexor (191).

Leung neither teaches nor suggests that memory can be sectioned so that a "subdivision of a word" can be selectively enabled or disabled. Rather than a subdivision of a word, Leung teaches that multiple (i.e., eight) words are always retrieved at once from a DRAM bank. One of those words is ultimately selected as output. Although only one of Leung's DRAM banks might be enabled at a time and the

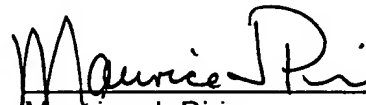
other banks disabled, each bank does not hold a subdivision of a word. Rather, each word is contained in a single bank. As a result, Leung can selectively enable or disable different words but not a subdivision of a word.

Each of the claims, including the newly added claims, recite sections that represent a subdivision of a word and that the sections can be selectively enabled or disabled. For example, claim 1 recites "each section representing a subdivision of a word" and "each section having a row enable line . . . and a column enable line . . . for enabling access to a subdivision of a word." Leung does not teach the concept of subdividing a word into sections and thus does not anticipate the claims.

Based upon the above remarks, applicants respectfully request reconsideration of this application and its early allowance. If the Examiner has any questions or believes a telephone conference would expedite prosecution of this application, the Examiner is encouraged to call the undersigned at (206) 359-8548.

Respectfully submitted,

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